

**METHOD AND APPARATUS FOR CLASSIFYING UNMARKED STRING
SUBSTRUCTURES USING MARKOV MODELS**

Abstract of the Disclosure

5 A technique for structurally classifying substructures of at least one unmarked
string utilizing at least one training data set with inserted markers identifying labeled
substructures. A model of class labels and substructures within strings of the training
data set is first constructed. Markers are then inserted into the unmarked string,
identifying substructures similar to substructures within strings of the training data set by
using the model. Finally, class labels of the substructures in the unmarked string similar
10 to substructures within strings of the training data set are predicted using the model.